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Editorial

Multiple Intracranial Aneurysms and Older Age Groups

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Multiple intracranial aneurysms are discovered in 15% to 35% of patients with aneurysm who present with subarachnoid hemorrhage (SAH) [1-3]. Population-based studies have indicated that increased age and female sex are significantly associated with SAH [2,3]. However, the correlation between increased age and female sex and the incidence of SAH patients with multiple aneurysms remains controversial [1-4] because few population-based studies have compared the proportion of SAH patients with a single aneurysm and that of patients with multiple aneurysms.

Among SAH patients, the frequency of aneurysm occurrence at each site is not always compatible between patients with a single aneurysm and those with multiple aneurysms [5]. There is not any established relationship between the prognosis for SAH patients and the number of cerebral aneurysm in the literature. The clinical characteristics of elderly patients with multiple intracranial aneurysms were studied [1,2]. In our study, A total of 48 patients, in whom the exact location of their ruptured aneurysms could be confirmed, were classified into two age groups, that is, those aged 59 years or younger (group 1: 24 cases, 50%) and those aged 60 years or older (group 2: 24 cases, 50%).

The incidences of multiple aneurysms were 33% for group 1 and 29% for group 2. It is believed that the difference between two groups is statistically not significant. The rate of multiple aneurysms was less frequent in males than in females in group 2, whereas no difference could be found in group 1. This result is similar to the previous studies [1-7].

There is also not difference of the age distribution between patients with multiple and single aneurysms in the literature. While the highest rupture rate was observed in the anterior communicating artery aneurysms of both groups, this tendency was more prominent in group 2 (77%) than in group 1 (62%). The rupture rates for other sites in group 2 were 45% for distal anterior cerebral artery aneurysms, 35% for internal carotid artery aneurysms and 25% for middle cerebral artery aneurysms. The outcome after surgical intervention showed no major differences between multiple and single aneurysms in either group 1 or 2. However, the first group had better surgical results than the second one. The results of our study are similar to the other researches [1-8].

Even though the surgical outcome for multiple aneurysms in elderly patients was not severe than other age groups, awareness of the probability of rupture at each location and side of involved artery is helpful, especially when it is necessary to decide whether unruptured aneurysms should be clipped, coiled or not [1-8]. These results suggest that each location is associated with a characteristic size and rate of aneurismal rupture. Special attention should thus be paid to large and anterior communicating aneurysms when operating on multiple cerebral aneurysms [1-8]. In fact, our results, confirmed the previous conclusions [1-8].

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